

# Greening the Hospitality Industry

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The lodging industry can have a significant, positive impact on the environment by adopting green practices described in this guide.

## Introduction

Tourism is the world’s largest industry, with international tourism receipts equaling \$856 billion in 2007. In Nebraska, tourism ranks third, behind agriculture and manufacturing, and earned \$3.3 billion in 2006. Of the tourism dollars spent in Nebraska, 27 percent goes to the 28,000 rooms in the state’s lodging industry.

As the biggest industry in the world, tourism has a large impact on the environment. The industry is initiating green practices to lessen its impact. The hospitality sector, which includes lodging, is making great strides toward instituting green practices and earning green certifications.

## What is Green?

Green refers to practices considered environmentally responsible because they reduce our ecological footprint or demand on natural resources and ecosystems.

Reducing our ecological footprint involves thinking about a product’s lifecycle from “cradle to grave.” That is how much energy and natural resources are used to produce, use, maintain, and dispose of a product. In the lodging industry it includes consumptive practices such as laundry, heating, cooling, lighting, paper, and shampoo bottles, and products such as a television or even a banana or bottle of water. Disposable products, such as plastic water bottles, have a larger footprint than reusable, refillable bottles.

Hotels, motels, and other lodging facilities that are green buildings can use much less energy than older, inefficient buildings. However, tearing down an old building to build a newer, green one may not be environmentally responsible when the disposal of old materials and the manufacture of new are considered. The energy savings of retrofitting versus rebuilding, and the costs of material production and disposal have to be compared. This is why green actions have to be thought through. Buying products labeled green may be less environmentally friendly than maintaining an older product.

## Why Go Green?

As pollution mounts, global warming increases, and natural resources are being depleted, the need to go green is more important than ever.

Natural resources are depleted when we drill for oil, mine for coal, log forests, fish, and use water, and these resources are being used faster than ever before.

Global climate change is a serious problem now that we have exceeded the sustainable level of carbon dioxide (CO<sub>2</sub>) in the atmosphere — 350 parts per million (ppm). Scientists believe that if we get the current level of CO<sub>2</sub> — 385 ppm — back to 350 ppm or below, the planet will avoid the devastating effects of global climate change. Can we get it back down to 350? If an international effort is made to go on a CO<sub>2</sub> diet, levels can fall back within the safety zone. The tourism and hospitality industry can play a key role in this effort.

## Tourism and the Environment

Tourism and the environment go hand in hand. People travel to snow ski, to go to sunny locations and enjoy the beach, scuba dive, and surf. Tourists visit parks, scenic areas and farms, and participate in activities such as biking, hiking, and watching wildlife. Even touring cities is more enjoyable with pleasant weather. However, global climate change threatens to raise sea levels, which could flood coastal areas; melt glaciers and snow packs, which may cause areas to become dry and arid; and decrease biodiversity, which threatens wildlife. The result is that areas and activities once enjoyed by tourists are made less attractive and hospitable.

Tourism contributes to climate change and the consumption of natural resources through tourists’ consumption of goods, use of energy for transportation, lodging, and attractions. The United Nations World Tourism Organization (WTO), as well as other industry organizations and leaders, are calling on all sectors of the tourism industry to reduce both greenhouse gas emissions (GHG), which increase global warming, and consumption. According to WTO, the lodging industry contributes 20 percent of GHG emissions. Consider these facts: the average hotel room in the U.S. generates up to 30 pounds of waste, uses 79,570 gallons of water, and costs \$2,196 per year for energy.

## Green Lodging

Every lodging property can take steps to reduce its carbon footprint and increase its green quotient. New properties can build green by using energy efficient designs. Older properties can incorporate green practices daily and into renovations. The great thing about going green is that it can begin with simple actions and build as you learn more and rethink more of your business practices.

## Benefits of Going Green

Businesses that implement green practices can increase their triple bottom line — that is they increase their social, environmental, and economic success for people, planet, and profit.

For example, fair trade, locally produced, and organic products help communities, reduce toxins, and help local economies, while also helping the environment. Energy-efficient products and practices also save money while helping the planet. Reducing energy consumption by just 10 percent increases the average daily room rate from \$.62 to \$1.35. Hotel water and sewer costs can be cut by 25-30 percent just by installing water-efficient fixtures.

Another benefit of greening lodging is meeting consumer demand and increasing satisfaction.

Many consumers are interested in green lifestyles and green tourism. In fact, marketers realize that the fastest growing target markets are Lifestyles of Health and Sustainability (LOHAS) and Naturalites.

The most environmentally concerned market segment is LOHAS. These consumers have reached 19 percent of the U.S. population. Naturalites (concerned with personal health and wellness and doing more for the environment) are the largest segment at 27 percent of the population. These segments are leading the way to ethical consumerism — making purchases based on values. These segments have become such a large and important segment for marketers and businesses, there is now a LOHAS website ([www.lohas.com/](http://www.lohas.com/)) and the *LOHAS Journal*, a magazine that helps businesses learn to target these market segments.

## Green Certification

Green certification by independent certifying organizations ensures hotels are really green and not simply greenwashing. *Greenwashing* refers to a business or product that claims to be green because one or two green practices have been adopted, while the majority of the business practices or products are not green. It is masquerading as green when in reality many harmful practices are still taking place. It is also a practice meant to mislead consumers about the environmental friendliness of a product or company.

The term greenwashing was coined in response to hotels that tried to appear green by leaving cards asking guests to continue to use existing towels and sheets rather than have them laundered daily, when the hotels took no other action toward environmental responsibility. This led to the assumption that the hotels really only cared about cost saving. Greenwashing is not good for public relations because consumers truly interested in green initiatives will be angered by the practice.

Green certification agencies require that a number of green initiatives are in place. Inspections or audits are conducted before certification is granted. Reputable green certifications include:

**Green Seal's Certification for Lodging Properties** ([www.greenseal.org/programs/lodging.cfm](http://www.greenseal.org/programs/lodging.cfm))

This nonprofit organization helps consumers identify certified green products and services. Green Seal-certified products meet science-based standards. The Green Lodging program certifies properties that fulfill the requirements of the GS-33 certification. Requirements include meeting standards for managing waste, water consumption, energy use, purchasing, and the use and disposal of hazardous substances. Properties can meet GS-33 lodging certification at the gold, silver, or bronze level.

**U.S. EPA ENERGY STAR for Hospitality Properties** ([www.energystar.gov/index.cfm?c=hospitality.bus\\_hospitality](http://www.energystar.gov/index.cfm?c=hospitality.bus_hospitality))

This program certifies buildings that are ENERGY STAR efficient. Hotels can begin the certification process by benchmarking or monitoring their energy use. A 2010 EPA Benchmarking Factsheet reports that over 5,000 properties have begun benchmarking, and over 400 have earned the ENERGY STAR certification.

**U.S. Green Building Council's LEED Certification** ([www.usgbc.org/](http://www.usgbc.org/))

This program originally began certifying new construction. Now older buildings can apply for LEED-EB, certification for existing buildings. Like the original LEED certification, LEED-EB has a four-level rating system from basic to platinum. LEED-EB certification examines energy and water efficiency, recycling, and air quality.

**Audubon Green-Leaf Rating Program** ([greenleaf.auduboninternational.org/](http://greenleaf.auduboninternational.org/))

Audubon International and partner TerraChoice Environmental Marketing developed this program to encourage lodging properties, conference centers, and destinations to increase their eco-efficiency. Businesses are rated with one to five Green Leafs.

**Green Globe 21 Certification** ([www.greenglobeint.com/](http://www.greenglobeint.com/))

Green Globe is an independent, third party certification program based on the 1992 United Nations Earth Summit's Agenda 21 principles of sustainable development. Green Globe certifies tourism and hospitality businesses that meet the Global Sustainable Tourism Criteria (GSTC).

## Going Green

According to the Union of Concerned Scientists, the most significant actions for reducing environmental impact come in large categories such as conserving fuel and energy, and reducing overall consumption, rather than in small actions such as using paper rather than plastic bags. Recommendations are to take action in each of the following categories:

- Energy efficiency
- Water conservation
- Consumption and waste

Some action steps for each category are given below; more detail can be found in the resources section.

## Energy Efficiency:

Conserving energy reduces greenhouse gases, pollutants, and the use of natural resources, and saves money. Energy-saving options to consider:

### — Lighting:

- Incandescent bulbs convert 5 percent of the energy used into light (the rest radiates as heat) and last 1,000 hours. Compact fluorescent lights (CFL's) convert 30 percent of energy into light and last 10,000 hours. LED (light emitting diodes) lights convert up to 70 percent of energy used into light and last more than 50,000 hours. While efficient, LED is still a new technology, and quality varies. With lighting often making up 10-35 percent of energy costs, switching bulbs is worthwhile.
- Upgrading from T12 fluorescent lighting fixtures with magnetic ballast to T8 fixtures with electronic ballast can save up to 32 percent in energy costs.
- Switching exit sign lights to LEDs saves 98 percent of the costs of operating the sign.

### — Heating and cooling

- Efficient HVAC systems can save a hotel 20-50 percent in energy costs.
- Occupancy Sensors that control heating, cooling, and lighting based on whether a room is occupied can reduce energy costs up to 50 percent.

### — Building materials

Efficient materials use less energy in production and increase energy efficiency. For example:

- A white, elastomeric roof reflects 80-90 percent of the sun's energy, reducing inside heat 5-20 degrees. White roofs also reduce air-conditioning use by an average of 24 percent and energy costs by 11-43 percent. They last longer than asphalt roofs, too.
- Living roofs have been found to be 25-80 degrees cooler than black roofs. They improve insulation by reducing both summer cooling and winter heating by 26 percent. Living roofs also double to triple the lifespan of a roof. They must be installed correctly to avoid moisture problems and to ensure the structure can accommodate the added weight.
- Sealing air leaks can cut heating and cooling costs by 20 percent.

### — Appliances

- ENERGY STAR appliances allow hotels to reduce energy costs 10 to 30 percent. For example, ENERGY STAR commercial dishwashers can save an average of \$850 per year in energy, and can cut yearly water use by 52,000 gallons, saving another \$200 per year. ENERGY STAR commercial ice machines can save \$100 per year in energy, and can cut yearly water use by 2,700 gallons, saving an additional \$10 per year.

## Water conservation:

Lodging properties use an average of 218 gallons of water each day for each guest room. Water-efficient plumbing fixtures can reduce water and sewer costs 25-30 percent.

### — Plumbing fixtures:

- Low-flow showerheads and dishwasher spray heads can replace regular nozzles.

- Dual-flush toilets use 1.6 gallons of water for solid waste and 0.8 gallons for liquid, whereas traditional toilets use 5 gallons for each flush. This cuts water use by 35-45 percent. The Hilton Palacio del Rio hotel with 480 rooms saved 6 million gallons of water in eight months after installing dual-flush toilets. If replacing toilets isn't an option, toilet tank fill diverters also can reduce water use.

### — Landscaping

- Native landscaping and xeriscaping can reduce water used for watering by thousands of gallons per year. Additionally, native landscaping can be used to attract butterflies to enrich guest experiences.

### — Laundry

- Green Suites International's O-Tech laundry system reduces chemical costs and water and sewer bills by 40 percent, and cuts hot water use by 60- 80 percent. The reduction in chemicals doubles the lifespan of linens.
- Reductions in laundry costs also can occur when guest room linens and towels are not changed daily. Cards encouraging the reuse of linens are available in the resource section.
- Laundry water can be reused as grey water in some states. This is not legal in Nebraska at this time.

## Consumption and waste

A single hotel purchases more products in one week than 100 families do in a year. Each room produces as much as 30 pounds of waste each day. California hotels alone generate 112,000 tons of food waste each year.

- **Guest room products:** Guest room toiletries such as soaps and shampoos can be bought in bulk and placed in pump dispensers attached to shower walls and sinks. This reduces costs, production, and waste from disposing of individual containers.
- **Kitchen:** Kitchen scraps can be composted, extra food donated, and kitchen grease recycled. In addition, food bought locally supports local farmers and reduces the energy used for transportation, while enriching the local experience.
- **Office waste** can be reduced by encouraging people to avoid printing unnecessarily and to print or copy on both sides of the paper. Select paper made from hemp, kenaf, or 100 percent post consumer recycled materials, and recycle.
- **Building materials** can be purchased from renewable materials. Cork and rubber flooring are very environmentally friendly and are low in contaminants that reduce indoor air quality. Carpet tiles also are environmentally friendly because stained and worn areas can be replaced without replacing the entire carpeted area.

## Gain Additional Green Ground

**Give back.** Part of profits can go to environmental causes. Helping local environmental efforts, such as those preserving local wildlife habitat, are good practices for tourism and hospitality businesses, especially those that serve wildlife watchers and ecotourists. Carbon offsetting credits can be



purchased to help reduce the impact of global climate change. One carbon credit offsets one metric ton of greenhouse gases going into the atmosphere.

**Get everyone involved.** It is important to get staff interested and involved in green initiatives. When staff understand the importance of being green and are motivated to help, initiatives are more successful. Staff also need to have their ideas for green innovation and initiatives heard; after all, those closest to the operation often have the most innovative and practical ideas.

**Improve air quality.** Measures that improve air quality include using products with low emissions of pollutants such as volatile organic compounds (VOCs). Thousands of products contain VOCs, including paint, adhesives, cleaners, pesticides, perfumed products, and some air fresheners. Certain levels of VOCs indoors can be a health hazard. Low-VOC paint, carpet, furniture, building supplies, and nontoxic cleaners are available.

Using extra-fine air filters in vacuums and in heating, ventilation, and air conditioning (HVAC) systems also help reduce indoor air pollution. Other measures include isolating and equipping janitor closets and supply rooms with their own exhaust fans, using pest control methods that include zero or minimal pesticide use, and establishing a low environmental impact cleaning policy.

### Going Green in Nebraska

Currently there are no green-certified lodging properties in Nebraska. A number of ecotourism destinations and other buildings have become green certified or are working to include green features in the construction and design of their buildings. These include Spring Creek Prairie Audubon Center in Lincoln, Pioneers Park Nature Center in Lincoln, The Iain Nicolson Audubon Center at Rowe Sanctuary in Gibbon, and Ponca State Park, which has two green cabins.

All three green nature centers in Nebraska are built using straw-bale construction, with the center at Rowe Sanctuary holding the record as the second largest straw-bale building in the U.S. The Pioneers Park Nature Center building has earned LEED Silver certification. These buildings are energy efficient, emphasize the use of recycled materials, including salvaged items in construction, low VOC materials, low-flow toilets, have composting and recycling programs in place, and work toward habitat restoration. In addition, the building at Pioneers Park has a living roof.

Government buildings in Nebraska that are LEED certified include the Carl T. Curtis Midwest Regional Headquarters of the National Park Service in Omaha, certified as LEED Gold, and The CIS (Citizenship and Immigration Services) Nebraska Service Center in Lincoln received LEED Silver certification. These buildings have programs to increase water efficiency, reduce construction waste, and energy efficiency through the use of green power. These organizations also encourage employees to carpool by providing preferential parking, and encourage employees to bike to work by offering showers and bike storage.

### Success Stories

The Willard Intercontinental, located one block from the White House in Washington D.C. was the first hotel to release a Global Reporting Initiative sustainability report in 2007. The report is based on the triple bottom line strategy of profit, people, and planet, emphasizing not only economic prosperity but also social responsibility and environmental protection. The hotel's efforts helped it earn the 2009 Mayor's Environmental Excellence Award for Outstanding Achievement by a Hotel, and the Chamber of Commerce Environmental Excellence Award in 2009 for operating with 100 percent wind power. It also won the D.C. Chamber of Commerce's 2009 Business of the Year Award, and the Condé Nast Traveler 2009 World Saver Award. To learn more about the Willard, visit [washington.intercontinental.com/](http://washington.intercontinental.com/).

For more examples of what individual hotels are accomplishing, visit The American Hotel and Lodging Association's Best Practices page, [www.ahla.com/content.aspx?id=3616](http://www.ahla.com/content.aspx?id=3616).

### Resources for More Information

American Hotel and Lodging Association's Environmental Initiatives — [www.ahla.com/green.aspx](http://www.ahla.com/green.aspx)  
Ecogreen Hotel — [www.ecogreenhotel.com/](http://www.ecogreenhotel.com/)  
Ecoreservations — [www.ecoreservation.com/](http://www.ecoreservation.com/)  
Ecorooms and Ecosuites — [www.ecorooms.com/](http://www.ecorooms.com/)  
Environmental Management for Hotels — [www.tourismpartnership.org/Publications/EMH.html](http://www.tourismpartnership.org/Publications/EMH.html)  
Globally Green Hospitality Consortium — [www.globalgreenhospitality.org/](http://www.globalgreenhospitality.org/)  
Green Hotelier — [www.greenhotelier.org/](http://www.greenhotelier.org/)  
Green Hotels Association — [www.greenhotels.com/](http://www.greenhotels.com/)  
Green Hotels Association Green Products Catalog — [www.greenhotels.com/catalog/index.htm](http://www.greenhotels.com/catalog/index.htm)  
Green Lodging News — [www.greenlodgingnews.com/](http://www.greenlodgingnews.com/)  
Project Planet Green Hospitality Cards — [www.projectplanetcorp.com/](http://www.projectplanetcorp.com/)  
UN Agenda 21 — [www.un.org/esa/sustdev/documents/agenda21/index.htm](http://www.un.org/esa/sustdev/documents/agenda21/index.htm)  
World Tourism Organization — [www.unwto.org/index.php](http://www.unwto.org/index.php)

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